APPLICANT:

FREY, Bernhard

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Amendments to the Claims

Please cancel, without prejudice and disclaimer to re-submission in a divisional or

continuation application, claims marked as cancelled, and amend claims marked as amended.

CLAIMS

1.-6. (Cancelled)

7. (New) Eccentric drive mechanism for a pump volumetrically acting unidirectional pump

including the following features:

a) at least one stroke member (HG) which is rotationally fixed to a shaft (W) of a crank

mechanism having at least one stroke bearing (HL) eccentric relative to a rotational

axis (XX) of the shaft (W);

b) the stroke bearing (HL) connecting the stroke member (HG) to a coupling member (KG)

which does not participate in a rotary movement and which is in turn connected by a

transverse bearing (QL) to at least one pressure member (DG) for a oscillating

delivery drive mechanism of at least one piston-cylinder unit of the pump;

c) at least one pressure delivery source (DQ) for a fluid lubricant being connected at it's

output side to the transverse bearing (QL) via a passage system;

d) the passage system, starting from a connection passage (KA) connected to the pressure

delivery source (DQ), including at least one first passage (K1) which extends through

the stroke member (HG) into the stroke bearing (HL) and at least one second passage

(K2) which extends from the stroke bearing (HL) through the coupling member (KG)

into the transverse bearing (QL);

e) a hollow space arrangement provided in the region of the stroke bearing (HL) within a

bearing surface (L1) associated with the stroke member (HG) for the further

conduction of the fluid lubricant fluid to the second passage (K2), the hollow space

arrangement having, within the bearing surface (L1) and in the peripheral direction of

the stroke member (HG), an arrangement which permits a flow of the fluid lubricant

between the first passage (K1) and the second passage (K2) in each case only within a

low pressure phase of the fluid lubricant in the stroke bearing (HL) and/or in the

transverse bearing (QL),

f) wherein the hollow space arrangement provided in the bearing surface (L1) of the stroke

member (HG) extends over at least a part of a peripheral section (UN) of the stroke

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member (HG) corresponding to the low pressure phase of the eccentric drive mechanism, has a boundary which extends at least section-wise with a spacing from the boundaries of the bearing surface (L1), and has at least one hollow space in the form of a groove (HKN) extending along a semicircular peripheral section of the stroke member.

- 8. (New) Drive mechanism in accordance with claim 7, whereinthe hollow space arrangement (HKN) includes a plurality of hollow spaces (HKN.1; HKN.2) arranged offset with respect to one another in the peripheral direction of the stroke member (HG) which are connected to one another or separately to the lubricating fluid system.
- 9. (New) Drive mechanism in accordance with claim 7, wherein the hollow space arrangement is bounded at a front peripheral angular spacing (av) by the front end, with respect to the direction of rotation, of the peripheral section (UN) of the stroke member (HG) corresponding to the low pressure phase of the stroke member (HG).
- 10. (New) Drive mechanism in accordance with claim 7, wherein the hollow space arrangement is bounded at a rear peripheral angular spacing (ah) by the rear end, with respect to the direction of rotation, of the peripheral section (UN) of the stroke member (HG) corresponding to the low pressure phase of the stroke member (HG).
- 11. (New) Drive mechanism in accordance with claim 10, wherein at least one of the peripheral angular spacings (av; ah) of the hollow space arrangement amounts to at most 10°.